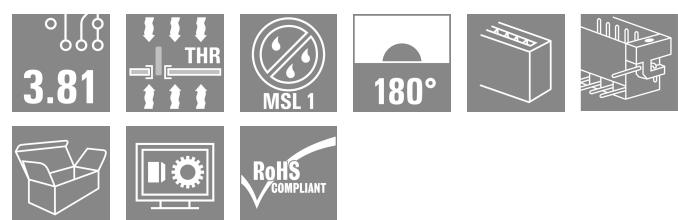


**BCL-SMT 3.81/12/180LFI 1.5SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergsstraße 26  
 D-32758 Detmold  
 Germany

[www.weidmueller.com](http://www.weidmueller.com)

**Product image**

The inverted BCL-SMT socket block for the PCB offers three significant advantages:

- The BCL-SMT offers touch-safe security on the PCB which makes it ideal for live, current-carrying outputs.
- The BCL-SMT widens the range of applications with board-to-board connections between component assemblies.
- The BCL-SMT is reflow-compatible and can be seamlessly integrated into the automatic assembly and soldering process.

Two outlet directions give you a choice of position and thus more design flexibility.

- 180° standing
- 90° recumbent

Two housing variants are available for the BCL-SMT:

- Without flange
- With inverted solder flange ("LFI", with nut)
  - Fastened to PCB without additional screw
  - Fastened with screw to the SCZ FI

Weidmüller's 3.81-mm-pitch (0.15 inch) plug-in connectors are compatible with the layouts of customary connectors and offer space for labelling and coding.

**General ordering data**

Version	PCB plug-in connector, female header, Solder flange inverted, THT/THR solder connection, 3.81 mm, Number of poles: 12, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box
Order No.	<a href="#">1029370000</a>
Type	BCL-SMT 3.81/12/180LFI 1.5SN BK BX
GTIN (EAN)	4032248758661
Qty.	50 items
Product data	IEC: 320 V / 17.5 A UL: 300 V / 10 A
Packaging	Box

## BCL-SMT 3.81/12/180LFI 1.5SN BK BX

Weidmüller Interface GmbH & Co. KG  
Klingenbergsstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)

## Technical data

## Approvals

Approvals



ROHS Conform  
UL File Number Search [UL Website](#)  
Certificate No. (cURus) E60693

## Dimensions and weights

Net weight 4.7 g

## Environmental Product Compliance

RoHS Compliance Status Compliant without exemption  
REACH SVHC No SVHC above 0.1 wt%

## System specifications

Product family OMNIMATE Signal - series BC/SC 3.81

Type of connection Board connection

Mounting onto the PCB THT/THR solder connection

Pitch in mm (P) 3.81 mm

Pitch in inches (P) 0.150 "

Outgoing elbow 180°

Number of poles 12

Number of solder pins per pole 2

Solder pin length (l) 1.5 mm

Solder pin length tolerance 0 / -0,02 mm

Solder pin dimensions d = 0.8 mm

Solder pin dimensions = d tolerance +0,05 / -0,05 mm

Solder eyelet hole diameter (D) 1.2 mm

Solder eyelet hole diameter tolerance (D)+ 0,1 mm

Outside diameter of solder pad 1.9 mm

Template aperture diameter 1.6 mm

L1 in mm 41.91 mm

L1 in inches 1.650 "

Number of rows 1

Pin series quantity 1

Touch-safe protection acc. to DIN VDE 57 106 Safe from back-of-hand touch

Touch-safe protection acc. to DIN VDE 0470 IP20 plugged

Volume resistance  $\leq 5 \text{ m}\Omega$

Can be coded Yes

Plugging force/pole, max. 9.5 N

Pulling force/pole, max. 6 N

Tightening torque

Torque type

Mounting screw, PCB

Usage information

Tightening torque

min. 0.1 Nm

max. 0.15 Nm

Recommended screw

Part

number

[PTSC KA](#)

[2.2X4.5](#)

[WN1412](#)

## BCL-SMT 3.81/12/180LFI 1.5SN BK BX

Weidmüller Interface GmbH & Co. KG  
Klingenbergsstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)

## Technical data

## Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 175	Moisture Level (MSL)	1
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Layer structure of solder connection	1...3 µm Ni / 2...4 µm Sn matt
Layer structure of plug contact	1...3 µm Ni / 2...4 µm Sn matt	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

## Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17.5 A
Rated current, max. number of poles (Tu=20°C)	15.4 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	13.8 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 76 A

## Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	50 V
Rated current (Use group B / CSA)	11 A	Rated current (Use group C / CSA)	11 A

## Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Packing

Packaging	Box	VPE length	241.00 mm
VPE width	116.00 mm	VPE height	24.00 mm

## Important note

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	<ul style="list-style-type: none"> <li>Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>P on drawing = pitch</li> <li>Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.</li> </ul>

**BCL-SMT 3.81/12/180LFI 1.5SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergsstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)

**Technical data**

- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

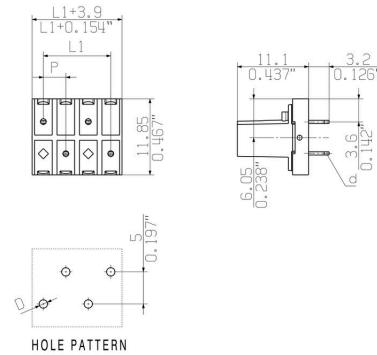
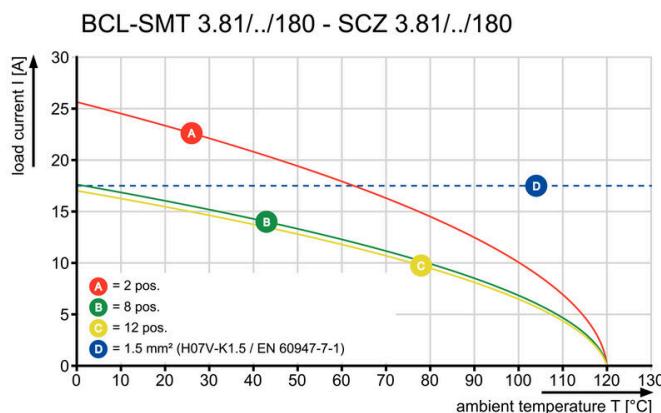
**Classifications**

ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

**BCL-SMT 3.81/12/180LFI 1.5SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergsstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)

**Drawings****Product image****Dimensional drawing****Graph****Graph**